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PHOTOGRAPHIC INTERPRETATION REPORT

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

# SS-X-16/-20 MOBILE MISSILE-RELATED ACTIVITY, USSR

**(TSR)** 25X1

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25X1 PIR-034/77

NOVEMBER 1977

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#### DISSEMINATION CONTROL ABBREVIATIONS

NOFORN- Not Releasable to Foreign Nationals NOCONTRACT- Not Releasable to Contractors or

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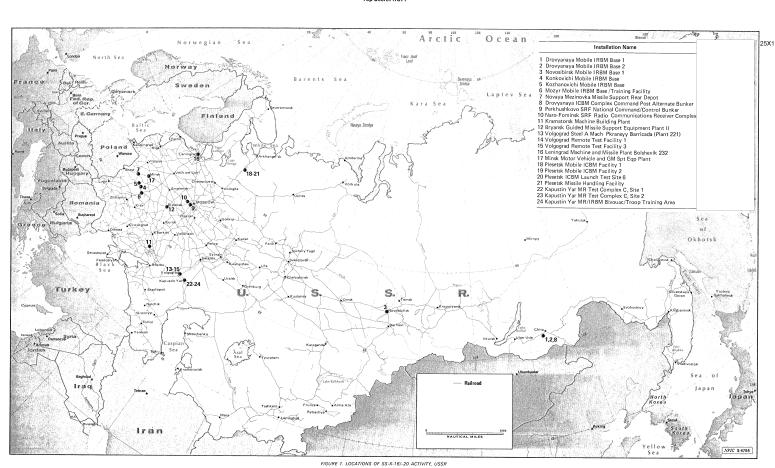
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SS-X-16/-20 MOBILE MISSILE-RELATED ACTIVITY,	
USSR, (TSR)	25 <b>X</b> ′
1. (TSR) SS-X-16/-20 mobile missile-related activity observed in the USSR (Figure is discussed in this report. Construction activity continued mobile IRBM bases and two missile test centers, and significant, new activity was identified.	d at six 25X° d for the
first time. This new activity includes the following: mottled netting at an 11-bay ga Drovyanaya Mobile IRBM Base 1; single-bay garages and a Sieman star resolution to Novaya Mezinovka Strategic Rocket Forces (SRF) Rear Depot in the western portion of the 180 kilometers (km) northwest of Mozyr SRF Division; SS-X-16/-20 ground support equ (GSE) at two national-level SRF command and control centers; and a six-axle chassis, six those used for the SS-X-16/-20 transporter-erector-launcher (TEL) and resupply vehi Kramatorsk Machine Building Plant.	arget at USSR, uipment milar to
2. (S) This report includes a location map with an inset table of installations and BE n and ten annotated photographs.	umbers
Deployed Mobile SSM Activity	
Drovyanaya Mobile IRBM Base 1	
3. (TSR) Construction in the launch area has been complete since July. No new be were identified under construction in the launch area or site support area during this reperiod; no SS-X-16/-20 GSE has been identified to date at this mobile base.	
an unidentified canvas-covered vehicle/piece of equipment was seen parked under	25X2 25X2 25X2
by 12-meter, open-sided shed.	
4. (TSR) In the site support area construction was continuing on ten support by (Figure 2). Also at least four separate pieces of mottled canvas or netting were	
the first time lying on the pavement in front of the 11-bay garage in the site support area.	25X^
similar canvas/netting had been erected for the first time in front of the 11-bay gara erected canvas/netting was approximately 22 by 17 meters and was attached to the garage a	
ported by four poles.	25X <sup>2</sup>
Drovyanaya Mobile IRBM Base 2	
5. (TSR) construction activity at this site was continuing. In the area all single-bay garages, the three-bay garages, the open-sided shed, and the missil	
building modifications had been completed.  In the site support area a second 11-bay garage was in the site support area.	he early 25X <sup>2</sup>
stages of construction adjacent to the recently completed 11-bay garage. The construction of new buildings and additional ground scraping throughout the facility suggest that more beconstruction will occur in the near future.	f several
Novosibirsk Mobile IRBM Base 1	
6. (TSR) construction activity at this site was continuing. At the area six single-bay garages (five with small building attachments), three three-bay garages, open-sided shed had been completed (Figure 3). Construction on the extension to the missil	and the le-ready
building was almost complete. (A similar extension, had been added to the bay, missile-ready bunker at Drovyanaya Mobile IRBM Base 1.)	
7. (TSR) In the site support area the second 11-bay garage was in the midstage of contion, two 30-meter-high communications towers were seen nearby. These	
are identical to those previously constructed at the SS-X-20-associated facilities, Drox Mobile Bases 1 and 2, and Kapustin Yar Missile and Space Test Center function is believed to be intracomplex communications.	
Konkovichi Mobile IRBM Base	
8. (TSR) no major changes had occurred at this facility. At least fi buildings were still under construction in the probable SS-X-20 payload handling area and support area (Figure 4). At the rail-to-road transfer point (RTP) construction was continuin new rail spur and on the new hard-surface roadway. Three new buildings had been complete the rail spur, and work was progressing on two probable aboveground storage tanks. Addit	the site g on the ted near tionally,
the canvas had been placed over the framework at the southern end of the rail s	spur. 25X1 25X1
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Kozhanovichi Mobile IRBM Base	
9. (TSR) No major changes had occurred at this facility the date of the latest available imagery of the facility. At least seven buildings were still in various stages of construction in the site support area (Figure 5). At the RTP numerous pieces of construction materials were visible. Construction was continuing on the new rail spur and on the buildings in the area. The shed over the rail spur was still present. However, construction at the Kozhanovichi base is progressing at a slower rate than at the Konkovichi and Drovyanaya IRBM mobile bases.	25X1
Mozyr Mobile IRBM Base/Training Facility	
the date of the latest imagery available of this facility, five single-bay, three three-bay, and two 11-bay garages were observed completed. Components for four additional single-bay garages were also present. At some of the garages small attachments similar to those seen at Drovyanaya Mobile Base 1 and 2 and Novosibirsk Mobile Base 1 were under construction. In a separately secured area adjacent to the launch area a high-bay building interconnected to a technical support building by a covered passageway had also been completed.	25X1
11. (TSR) Construction is continuing on the new RTP; at least three rail spurs are being constructed.	
12. (TSR) Information on additional activity observed at this facility can be found in a previous NPIC report.	
Novaya Mezinovka Missile Support Rear Depot	
13. (TSR) Three SS-X-20-associated, single-bay garages were identified in a separate wall-secured area at this facility The three garages are in an area of dense tree canopy.	25X1 25X1
14. (TSR) a Sieman star photographic resolution target was newly identified within the support depot about 1 km east of the three single-bay garages (Figure 7).	25X1
The calculated optimum system resolution for this Sieman star is approximately 2 meters, suggesting that it would probably be used for testing by a lower resolution Soviet photographic reconnaissance system.	25X1 25X1
SS-X-16/-20 Communications-Related Activity	
Drovyanaya ICBM Complex Command Post Alternate Bunker	
15. (TSR) At this installation a trailer-mounted TWIN EAR (in stowed position) was observed for the first timeThe TWIN EAR was parked in front of the vehicle maintenance support building and was still there on all subsequent coverages. Also, a cable trench was seen extending from the west side of the vehicle maintenance support building and connecting the two 30-meter-high lattice towers. The cable trench then continues past the towers to a possible hardstand area under construction. Each of the lattice towers has another cable trench extending from the base of the tower to the alternate command post bunker. A cable trench also extends from the west side of the bunker to the possible hardstand area. Cable junction boxes have been identified on each side of this area. When completed, this may be the parking area for the trailer-mounted TWIN EAR.	25X1
Perkhushkovo SRF National Level Command/Control Bunker and Naro-Fominsk SRF Radio Communications Receiver Complex	,
16. (TSR) SS-X-16/-20-associated GSE was identified for the first time at Perkhushkovo SRF National Level Command/Control Bunker and at Naro-Fominsk SRF Radio Communications Receiver Complex in August and September, respectively. Additional information on this identification can be acquired in a previous NPIC report. <sup>2</sup>	
SS-X-16/-20-Related Production Activity	
Kramatorsk Machine Building Plant  17. (TSR)  a six-axle chassis with a split cab was identified for the first time at this plant (Figure 8). This chassis is similar to those seen at Minsk Motor Vehicle	25 <b>X</b> 1
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Plant, where chassis for the six-axle SS-X-16/-20 TEL/resupply vehicles are produced, and at Volgograd Steel and Machinery Plant Krasnyy Barricada 221, where the final assembly on the SS-X-16/-20 vehicles is done. At this time it is not possible to determine how the Kramatorsk Plant is involved in the SS-X-16/-20 GSE program. Other vehicles seen near the six-axle chassis included seven canvas-covered MAZ-535/537, three dump trucks, and two unidentified chassis. 18. (TSR) The Kramatorsk Plant was previously identified as a headworks components production plant for Soviet missile and launch control silos. Headworks components were seen at 25X1 various locations throughout the plant Bryansk Guided Missile Support Equipment Plant II 25X1 19. (TSR) This plant has been observed twice on imagery of poor-to-fair interpretability. Analysis of the imagery indicates that the number of SS-X-20 garage sections at the plant is continuously decreasing. 25X1 components for at least one complete, sliding-roof, single-bay garage were shipped from the plant and enough components for another complete garage were newly fabricated. Overall, the total number of garage components at the plant decreased from to approximately 32 <sup>2</sup>25X1 25X1

21. (TSR) the garage components observed included at least two stationary roof-(peak roofed) end sections, at least eight stacks of corner posts, and approximately 21 stacks of sliding-roof sections/wall stanchions. Because of poor-quality imagery, neither the number of nor a differentiation between sliding-roof sections and wall stanchions could be determined.	25 <b>X</b> 1
22. (TSR) the number and type of garage sections could not be determined. However, a comparison of the locations of garage sections indicates that the number of sections present had decreased.	25X1 25X1
Volograd Steel and Machinery Plant Kransyy Barricada (Plant 221)	051/4
23. (TSR) This plant was observed Ten to 12 chassis for the MAZ-543 missile support van were present at the plant on all three dates. No SS-X-16/-20 TEL/resupply vehicles vans were observed.	25X1 25X1
Volograd Remote Test Facilities 1 and 3	
24. (TSR) Remote test facility 1 ; no SS-X-16/-20 equipment was present. Remote test facility 3 was observed one SS-X-16/-20 TEL/resupply vehicle was present on all four dates.	25X1 25X1 25X1
Leningrad Machine and Missile Plant Bolshevik 232	
25. (TSR) Analysis of the plant from imagery indicates that the objects identified as suspect SS-X-20, sliding-roof, single-bay garage components on imagery are probably not SS-X-20 associated.	25X1 25X1 25X1
	25 <b>X</b> 1
Minsk Motor Vehicle and Guided Missile Support Equipment Plant	
26. (TSR) This plant was partially covered  No mobile missile equipment was discernible on either date.	25X1 25X1
SS-X-16/-20 Test Range Activity	
Plesetsk Missile and Space Test Center	
27. (TSR) Construction activity was continuing at mobile launch facilities 1 and 2 of the Plesetsk Missile and Space Test Center and in the receiving, inspection, and maintenance (RIM) area of launch site 6 (an SS-7 silo site). Also, activity was seen in the SS-X-16 receiving/checkout area of the missile handling facility.	25 <b>X</b> 1
28. (TSR) Plesetsk Mobile ICBM Facility 1. construction was continuing at this launch site (Figure 9). Two of the three 11-bay garages (both 66 by 18 meters) were in a late stage of construction. These two 11-bay garages are in the south area of the launch site along with a	25 <b>X</b> 1
high-bay building, two-bay, open-sided shed. A foundation for a clerestory building (possibly associated with warhead handling) was also under construction in this area. The buildings in this area of the launch site are similar to those in the probable payload assembly/checkout facility under construction at the Kozhanovichi and Konkovichi mobile IRBM bases. All three bases/facilities have a clerestory building; a high-bay building with a single-story, side-bay, workshop area; a possible technical support building, which is connected by a covered passageway to the high-bay building; at least one 11-bay garage; and several other support buildings. However, at Plesetsk the buildings differ in size, configuration, and location. The building at Plesetsk Mobile ICBM Facility 1 that may serve as a possible technical support building is an old existing, SS-7, two-bay garage which has probably been modified to support the SS-X-16 missile system.	25X1 25X1
29. (TSR) Additional activity at this site includes the use of netting, which was seen erected between the two missile-ready buildings	25X1
between the two missine-ready bandings	25X1
a circular excavation was seen for the first time near one of the single-bay garages in the launch area (Figure 9).	25 <b>X</b> 1
30. (TSR) Plesetsk Mobile ICBM Facility 2. Construction was continuing in the launch area and near the old SS-8 nuclear warhead facility foundation stanchions for the three nine-bay garages were still present and little or no additional construction progress was evident. Some wall stanchions had been erected at the fourth 11-bay garage. Construction was continuing at a slow pace on the possible high-bay building and on the clerestory building. The func-	25X1
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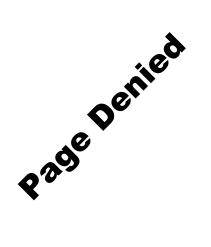
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tion of the clerestory building was previously undetermined; however, trenching from this building to several of the old SS-8 warhead-associated bunkers suggests that this building may function as a payload assembly/checkout building for the SS-X-16.
31. (TSR) Plesetsk ICBM Launch Test Site 6. Modification of the RIM area at this site has been underway since September 1976. Modification of the three drive-through, missile-ready
been underway since September 1976. Modification of the time differences, missing-ready
bunkers has been completed; construction was continuing on the three 11-bay garages
Two of the three 11-bay garages were almost complete externally, and roofing panels were
being placed on the third garage. The access roads serving the modified missile-ready bunkers were
being paved.
32. (TSR) Plesetsk Missile Handling Facility. construction on three shed-type
structures was complete in the SS-X-16 receiving/checkout area of the missile handling facility. By
a canvas-covered vehicle was seen parked under one of the new sheds. On two
canvas-covered, MAZ-type vehicles were seen for the first time since April, when a MAZ-543 mis-
sile support van was observed at this facility.
she support van was observed at this facility.
Kapustin Yar Missile and Space Test Center
33. (TSR) Kapustin Yar MR Test Complex C, Site 1.
On that date
an SS-X-20 missile was launched at 1700 Greenwich Mean Time (GMT) from Kapustin Yar Missile
Test Center.3 The launch, the culmination of a probable SS-X-20 crew training exercise involving
launch sites 1C and 2C, probably took place from launch pad 1C-3. On at 0725 GMT, two
SS-X-20 canisters on TEL/resupply vehicles and two probable MAZ-543 missile support vans were
observed at 1C-3.
observed at 10-5.
This imagery was acquired
two days after the launch of an SS-X-20 from the test center. The pattern of vehicle clearings seen
was reported in a previous NPIC report.5
34. (TSR) Kapustin Yar MR Test Complex C, Site 2. Significant activity seen at this site
during this reporting period has involved two SS-X-20 crew training exercises, which culminated in
SS-X-20 launches During both of these exercises, launch site 2C
probably functioned as a field support area from which TEL and other support vehicles would con-
voy to a predetermined launch position, probably 1C-3. Preparations indicating the use of site 2C as
a probable SS-X-20 field support area were first observed when four drive-through revet-
ments were seen. One of the revetments was about 139 by 7 meters and the other three were about
59 by 7 meters. a partially canvas-covered framework had been erected over the 139- by
7-meter revetment. two TEL/resupply vehicles and one MAZ-543 were observed in
that revetment. To date no vehicles have been seen in the 59-meter-long revetments.
35. (TSR) The SS-X-20 crew training exercise involved a total of 23 canvas-covered
vehicles, two of which were probably SS-X-20 TEL/resupply vehicles with canisters. Thirty-eight
venicles, two of which were probably SS-A-20 1EL/resupply venicles with cambels. Inity-cight
tents, each with a ten-to-12-man capacity, and bases for four more tents were observed.
36. (TSR) Two days after the launch of an SS-X-20 from Kapustin Yar, 20
canvas-covered vehicles, including two probable TEL, and one canvas-covered, truck-mounted
TWIN EAR were observed at site 2C (Figure 11). These vehicles probably participated in the crew
training exercise which culminated in the SS-X-20 launch No vehicles were obser-
ved at 1C
observed here since the last summary report has included the identification of a possible
observed here since the last summary report last neither the internation of a possible
command-and-control-associated silo and the sighting of the largest number (six) of TEL/resupply
vehicles These six vehicles were canvas covered and parked in the motor pool. The six
vehicles were possibly involved in the SS-X-20 crew training exercise and launch
38. (TSR) Analysis of imagery of the motor pool indicated that the five vehi-
cles, which were previously identified from imagery as partially assembled SS-X-16/-
20 TEL/resupply vehicles, are transporter/trailers.

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- 10 -Top Secret



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REQUIREMENT	
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